SVEL Dry type transformers

Alexey Zaikin

Director of Dry Type Transformers Sales Department

Ismaiel Ahmed

Technical Sales Engineer

SVEL

SVEL

22 years
Company has established in 2003

5000 employee,
Includes more than 300 engineers

> 333 million USD –
Company's annual revenue

11 facilities
in Russia and Europe

35 production lines and more than 30 new products developed by our engineers.

15 R&D projects, we constantly improving our products and the quality of the work.

DESIGN DEPARTMENT

- Calculations
- Design

PRODUCTION CAPACITY

- Production
- Testing

SPECIALIZED CONTRACTING

- logistics
- Installation & commissioning
- Services & repair works

SVEL Group has all the necessary resources and competencies for the implementation of complex projects: from the design stage to commissioning of the facility.

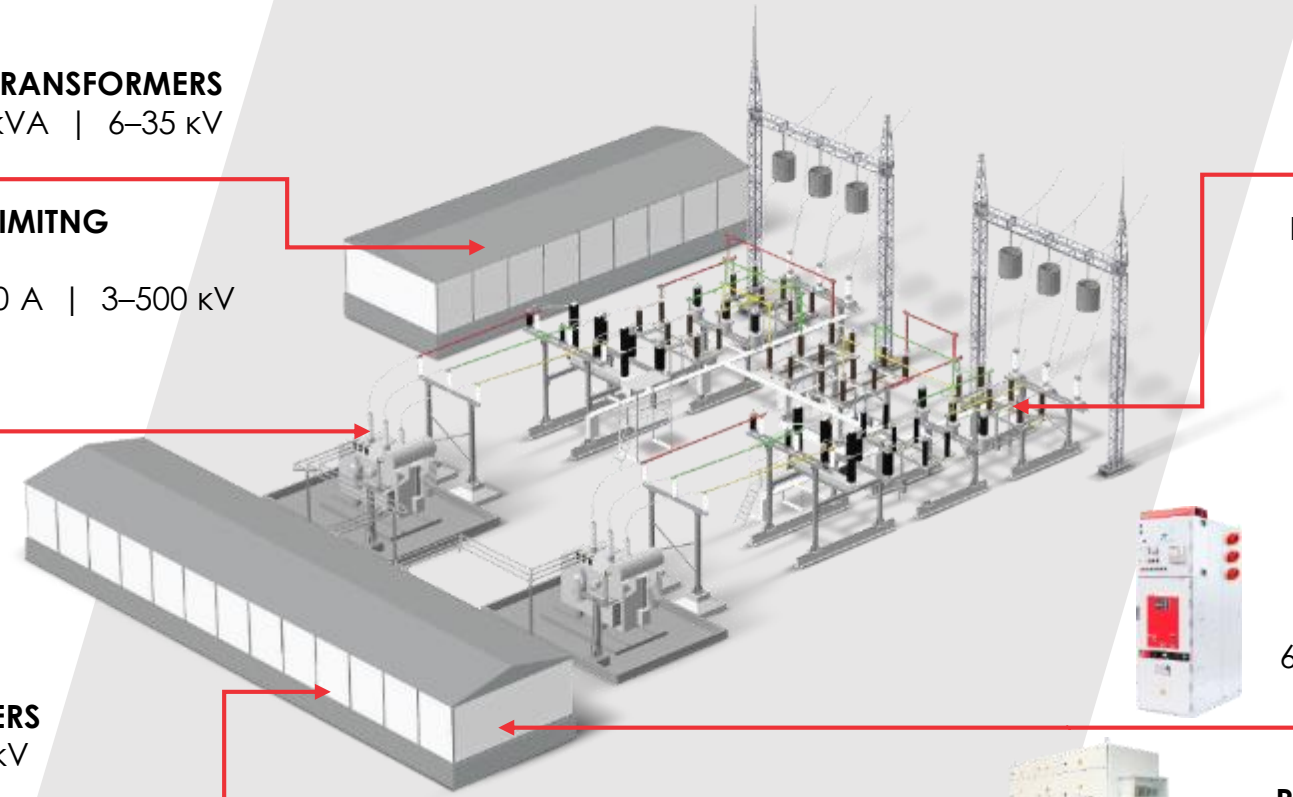
Dry Type Cast Resin Transformers

DRY TYPE TRANSFORMERS
16–25000 kVA | 6–35 kV

CURRENT LIMITNG REACTORS
Up to10000 A | 3–500 kV

OIL-FILLED TRANSFORMERS
2,5–630 MVA | 6–750 kV

MEASUREMENT TRANSFORMERS
6–220 kv



HV CIRCUIT BREAKERS
35–220 kV

DISTRIBUTION PANELS
630–4000 A | 6–35 kv

PACKAGE SUBSTATION
630–4000 A | 250–2500 kVA

GENERAL INFORMATION

2003 *year of foundation*

more than

20 000 *transformers manufactured*

1700 *Skilled workers and engineers*

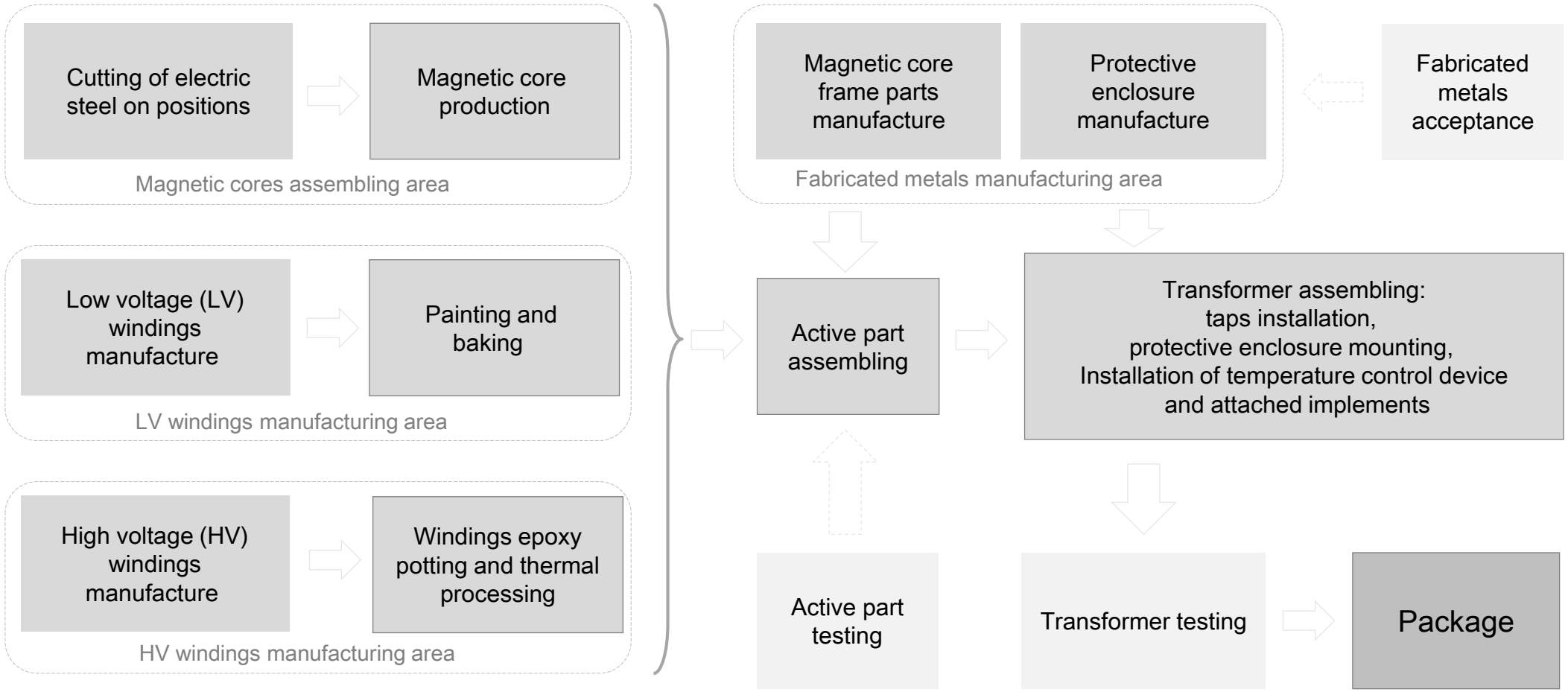
108 178 *sq.m – facilities area*

4200 *transformer/year production capacity*

TECHNICAL PARAMETERS

Power rate	16kVA – 25MVA
HV Insulation Level	6 – 38 kV
Tap changer	Off-load (or) On-load
Frequency (Hz)	50 (or) 60
Thermal Class	F (155 °C)
Environmental Class	E2 – E3
Climatic Class	C1 – C2
Fire Behavior Class	F1
Enclosure IP	IP00 – IP54
Seismic Intensity, MSK-64	Up to 9
Ambient Temp	+55 °C
Type of Cooling	AN – ANAF
Material	Al – Cu
Pl – Po losses	Eco-design

SVEL DRY TYPE TRANSFORMERS PRODUCTION PROCESS



Dry Type Cast Resin Transformers Production

1. MAGNETIC CORE
2. WINDING
3. ACTIVE PART
4. ASSEMBLY
5. BODY PARTS
6. TESTING
7. PACKING

Dry Type Cast Resin Transformers Production

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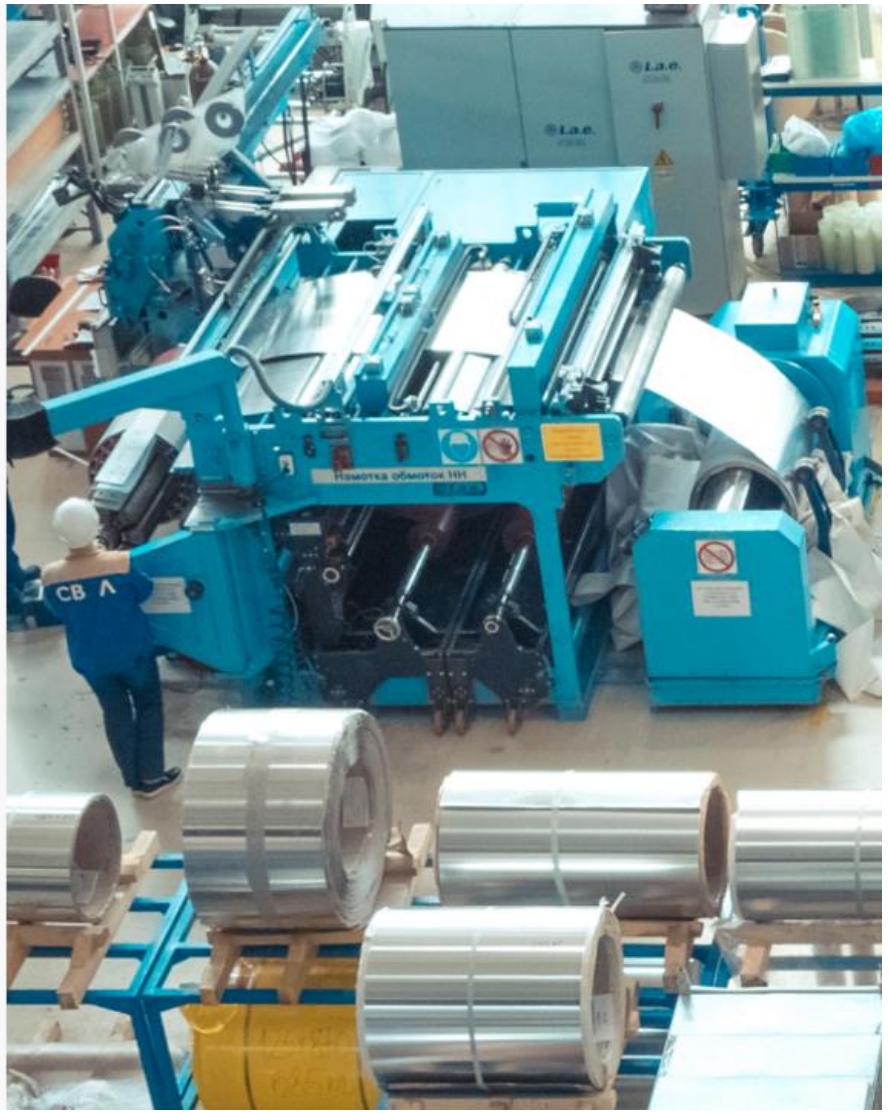

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Dry Type Cast Resin Transformers Production

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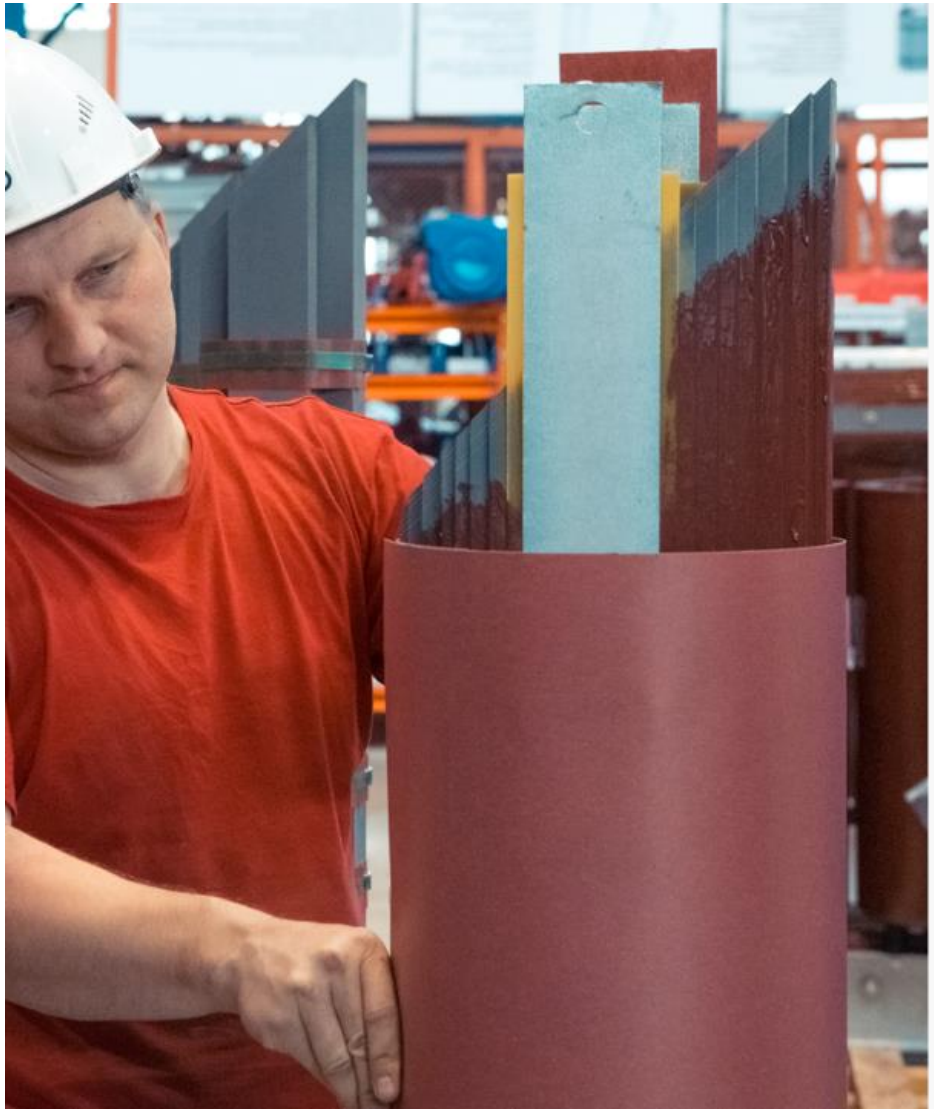

The winding connection diagram and additional bus-bar are being assembled.

Dry Type Cast Resin Transformers Production

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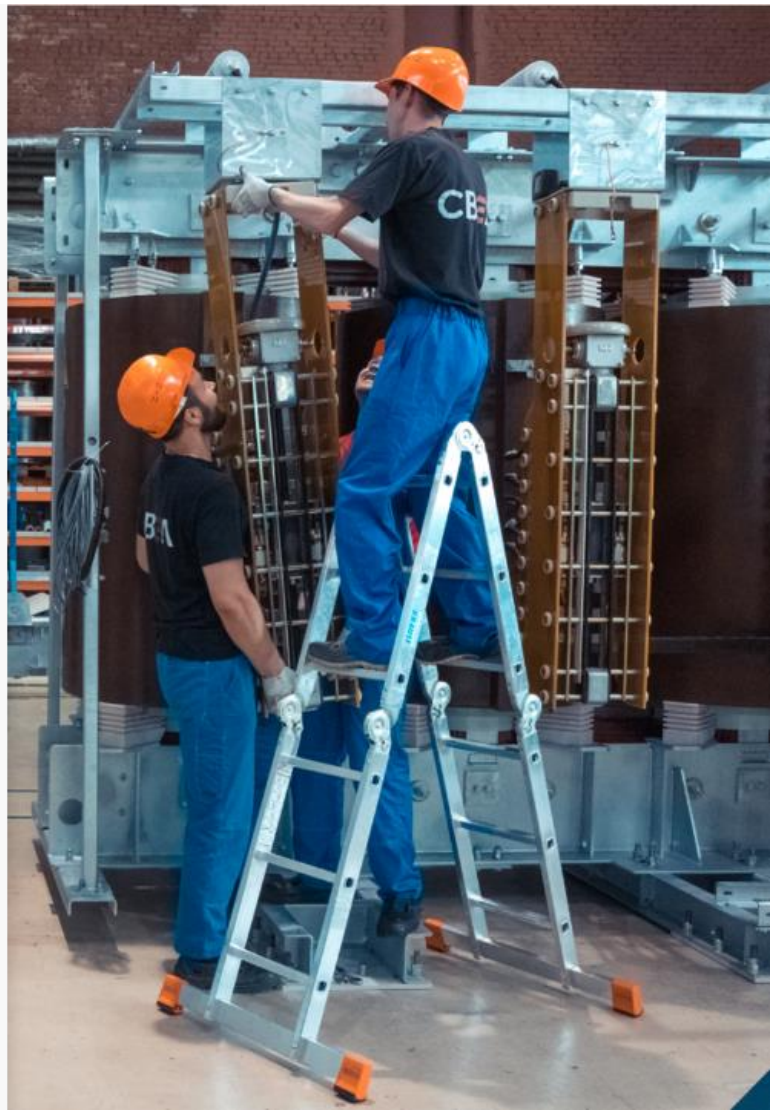

Additional attachments are mounted in the transformer.

Dry Type Cast Resin Transformers Production

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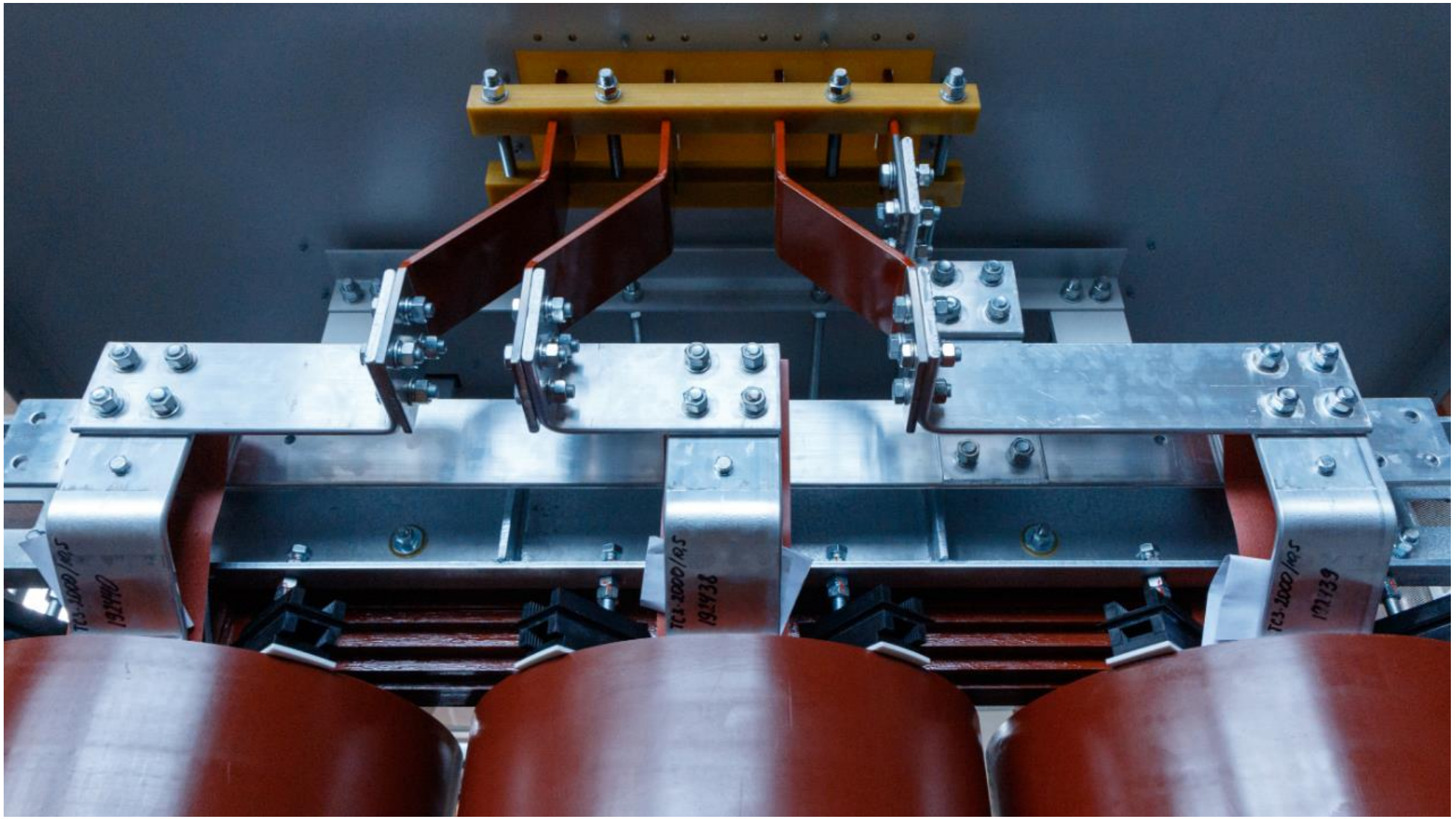

a. Hot-dip galvanizing of metal structures ensures corrosion resistance throughout the entire service life.
b. Additional insulation of the magnetic core increases resistance to mechanical, climatic and electrical factors.
c. Improving the quality of fixing bolted joints by using glue with a special composition.

Dry Type Cast Resin Transformers Production

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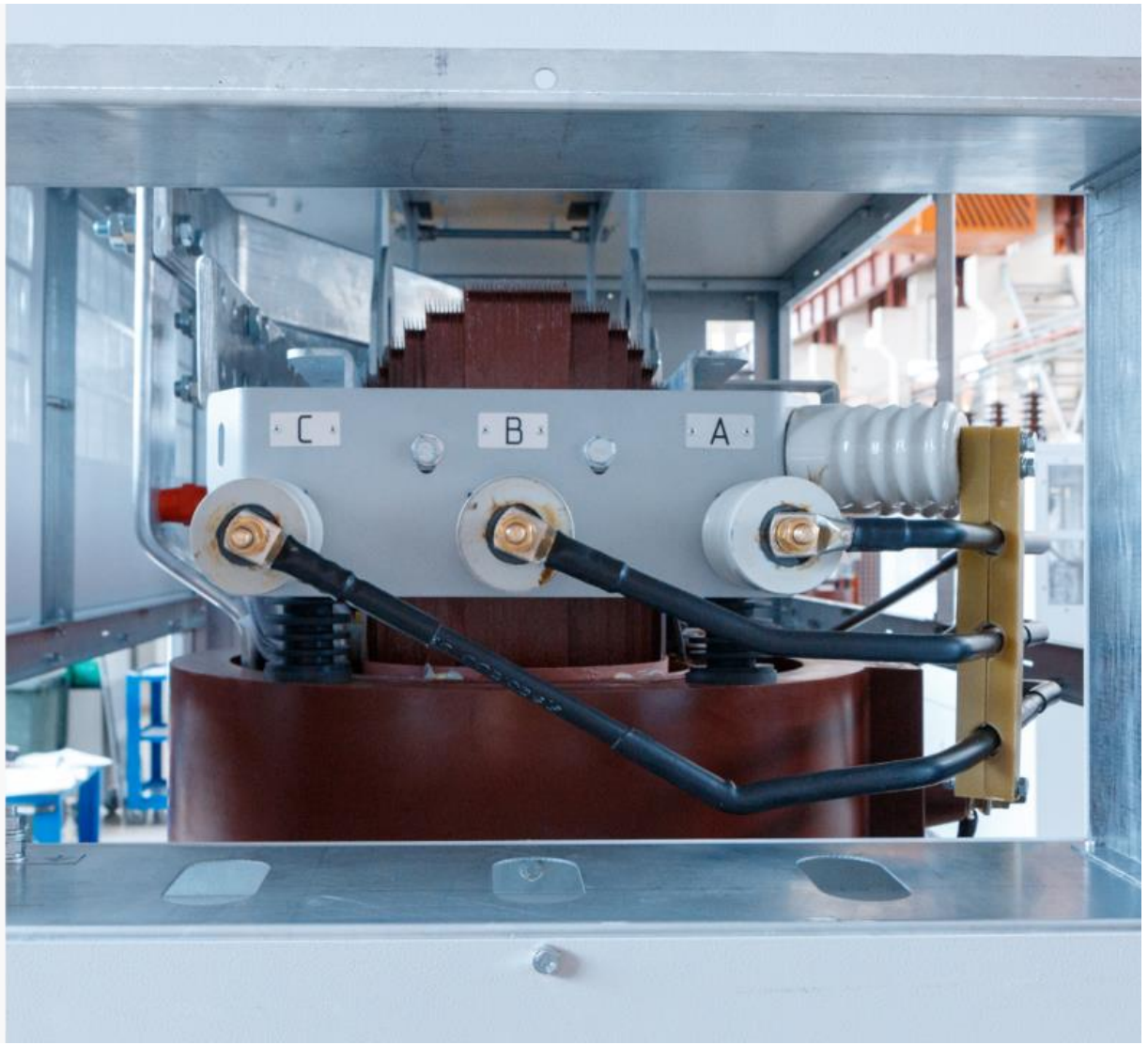

Dry Type Cast Resin Transformers Production

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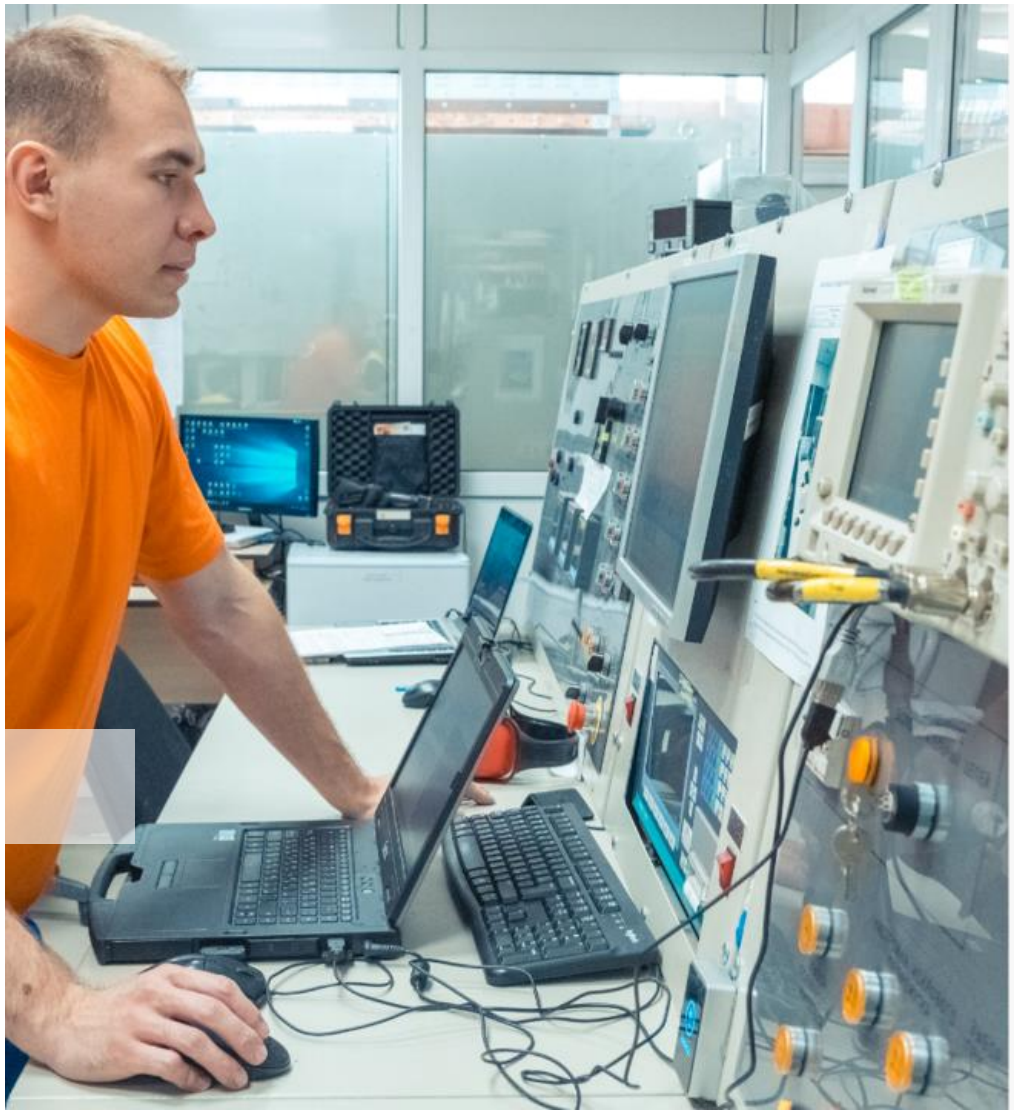


a. The fully assembled transformer is inspected by Quality Control Department before testing.
b. The entire volume of acceptance tests of transformers is carried out at a complex automated testing station.
c. Information received from the tests is entered into a computer, analyzed and issued a ready-made test report and passport.

Dry Type Cast Resin Transformers Production

1. MAGNETIC CORE
2. WINDING
3. ACTIVE PART
4. ASSEMBLY
5. BODY PARTS
6. TESTING
7. PACKING

ilac

ACCREDITED ISO/IEC 17025 LABORATORY

Dry Type Cast Resin Transformers Production

1	MAGNETIC CORE
2	WINDING
3	ACTIVE PART
4	ASSEMBLY
5	BODY PARTS
6	TESTING
7	PACKING

Transformers are sent to the customer packed in wooden boxes or polyethylene stretch film.
The type of packaging is selected depending on the requirements for protection against the effects of climatic factors and environment, the method of transportation depends on design features and the individual requirement of the customer.

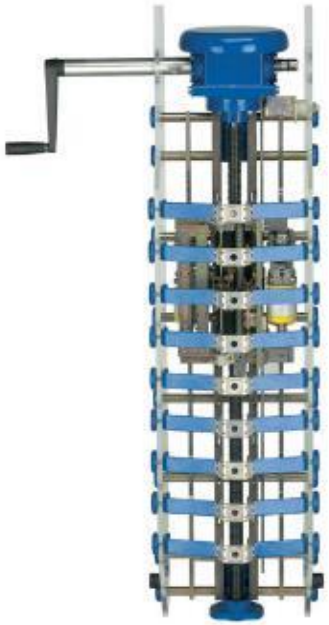
MAIN ACCESSORIES

Protective Enclosure

Vibration suppressor’s kit

Instrument transformer’s kit

Radial-flow fans with temperature-dependent control

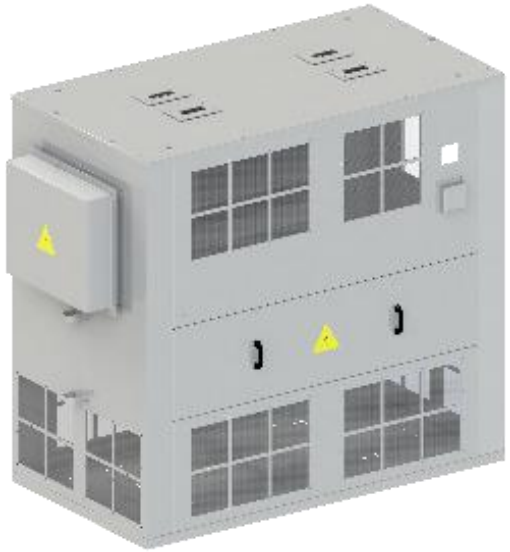


On-load tap changer

PROTECTIVE ENCLOSURE

IP 00

IP 31

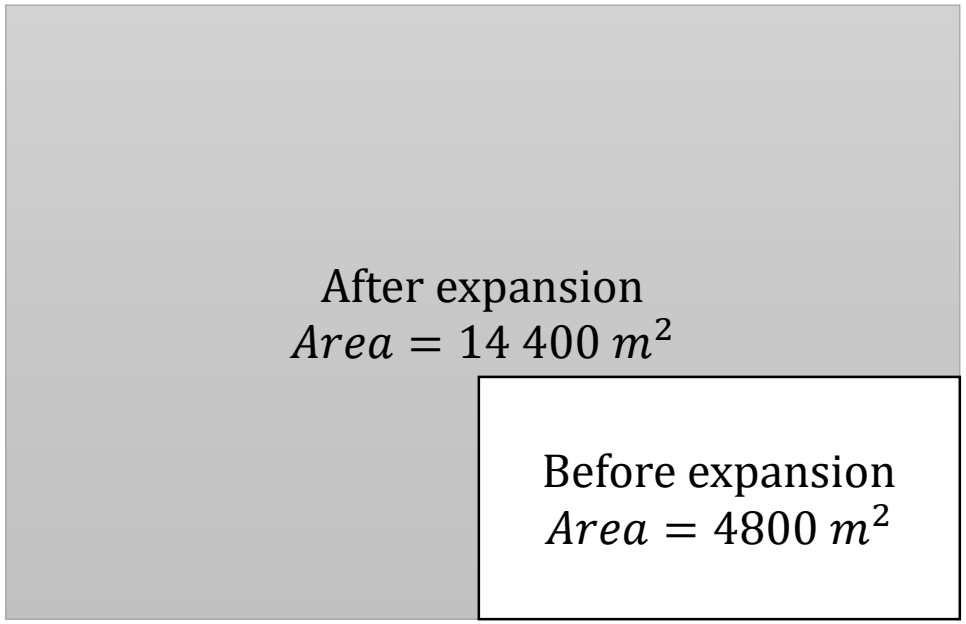


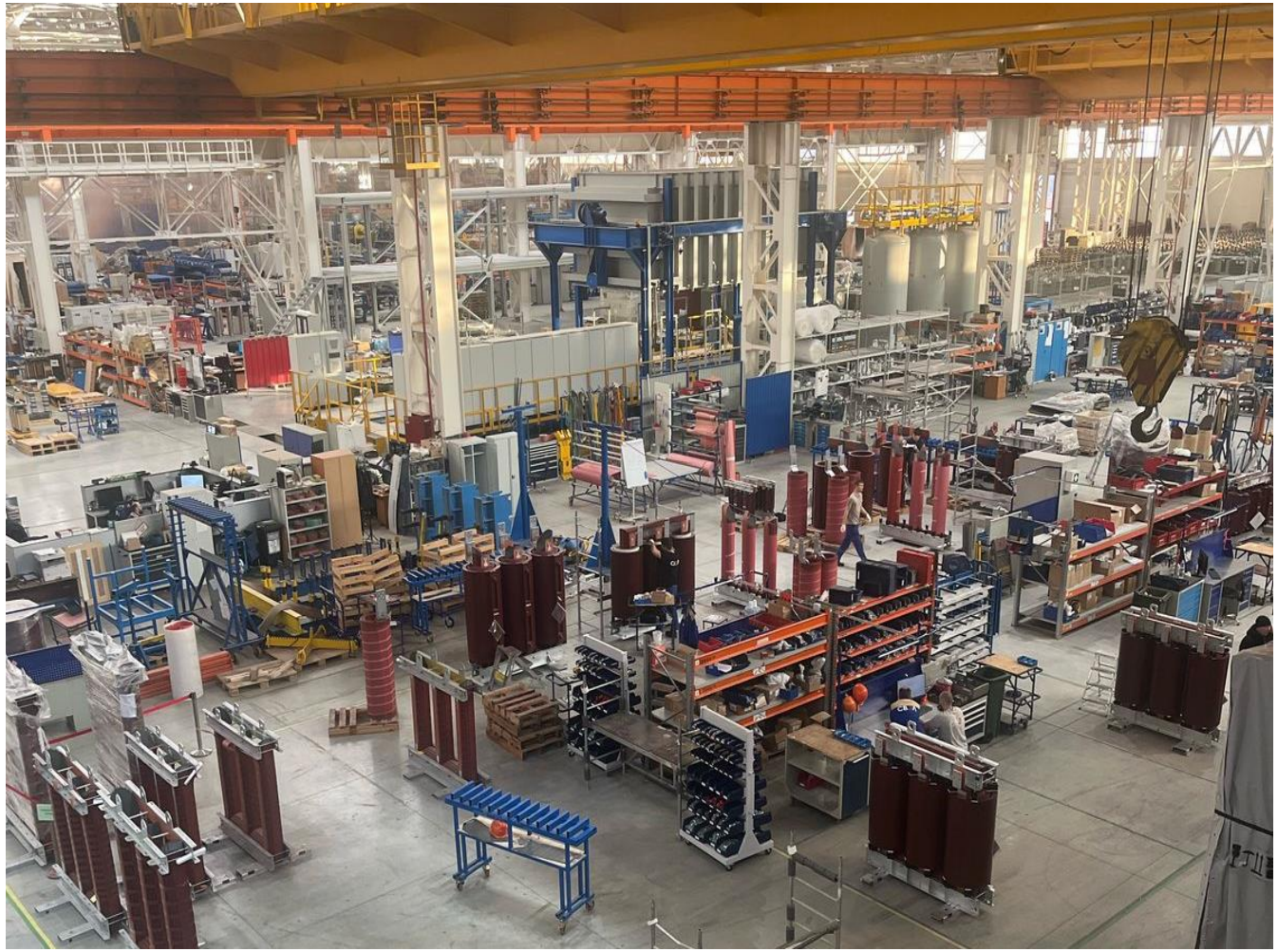
IP 21

IP 54

FACTORY EXPANSION – Production Area

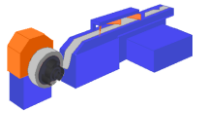
SVEL has about tripled the size of its Dry Type Cast Resin Transformer production facility.





EQUIPMENT EXPANSION - Equipment

Before expansion



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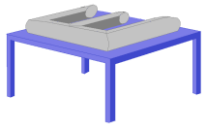
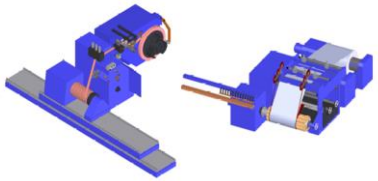


2

3



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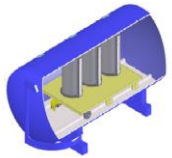

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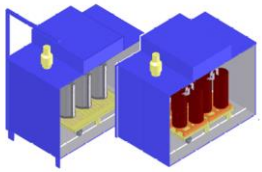

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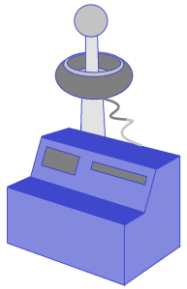
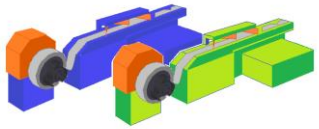
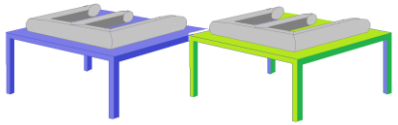


1

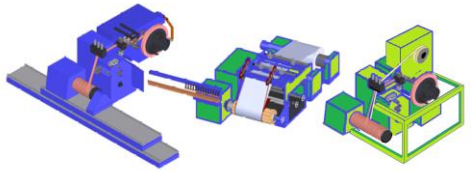
After expansion



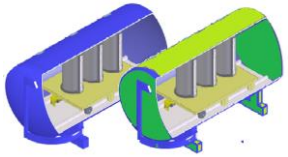
5 Nos. Steel cutting lines



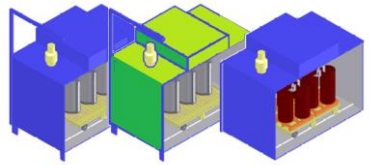
12 Nos. Core assembling table



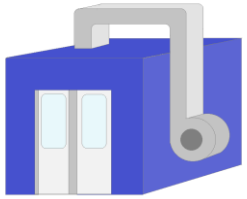
18 Nos. Winding machines



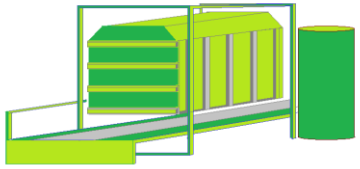
2 Nos. Vacuum casting autoclave



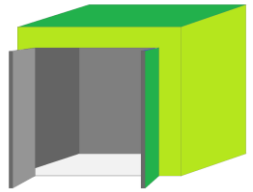
8 Nos. Furnaces



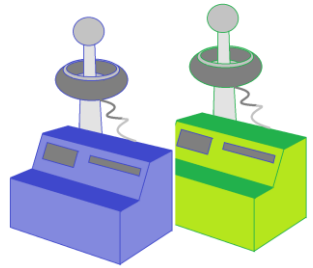
3 Nos. Painting booths



1 Nos. Vacuum Oil filling line



1 Nos. Noise chamber



2 Nos. Testing labs

Photovoltaic Power Plant
LUKOIL and AVELAR

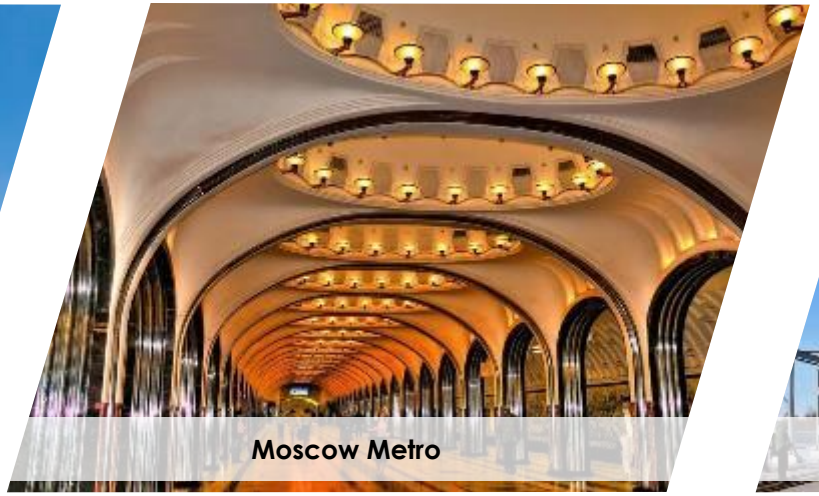
Oil Processing Plant
The Linde Group

Large Hadron Collidor

Belaroskaya Atomic Power Plant

High-Tech City INNOPROM

Techno-Park SKOLOVO



Moscow Metro

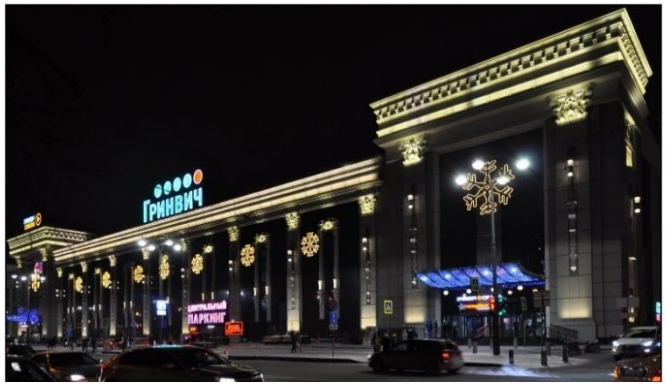
Space Port
KOSMDROM East

SVEL equipment is an integral part of important strategic projects

INFRASTRUCTURE - KEY PROJECTS

Lotte Hotel
4 pcs 1600kva 11/0.4kv

Yekaterinburg Stadium
12 pcs 2000kVA 10/0.4kV



GreenVitch Mall
12 pcs 2500kva 10/0.4kv

Volgograd Stadium
10 pcs 1600kVA 10/0.4kV

Airport Roshena, Tyumen City, Russia.

Airport Chkalovsky, Nigninovgorod City, Russia.

Sports and Tourist Center , Krasnaya Polyana, Russia

ASTANA Marriott Hotel, Kazakhstan.

Airport Kaltsova, Yekaterinburg City, Russia.

Airport Salekhard, Yamalo-Nenets, Russia.

URALMASH Sports Complex, Russia.

TERMOGAS Power Plant, Ecuador.

GRINVICH Shopping Mall, Russia.

Ekaterinburg International Exhibition Center, Russia.

KUDANKULAM Nuclear Power Plant, India.

Belarusian Railways, Belarus.

INNOPOLIS New High Tech City, Russia.

ATOMIC POWER PLANTS - KEY PROJECTS

ROSTOV NPP

KALININ NPP

NOVOVORONEZH NPP

BALAKOVA NPP

SMOLENSK NPP

BELOYARSK NPP

VORONEZH NPP

ROSATOM

ROSATOM NUCLEAR POWER PLANT

68 Trs. 1000 KVA 6/0.4 KV
44 Trs. 1600 KVA 10/0.4 KV
35 Trs. 1000 KVA 10/0.4 KV
13 Trs. 400 KVA 6/0.4 KV
9 Trs. 400 KVA 10/0.4 KV

TOTAL 169 Transformers

OIL & GAS - KEY PROJECTS

LUKOIL OIL COMPANY

2 Trs. 400 KVA 10.5/0.4 KV
2 Trs. 1000 KVA 6/0.4 KV
6 Trs. 1250 KVA 6/0.4 KV
2 Trs. 1600 KVA 6/0.4 KV
2 Trs. 2500 KVA 6/0.4 KV

LUKOIL KOMI

4 Trs. 630 KVA 6/0.4 KV

LUKOIL DJARKUDUK Substation Uzbekistan

4 Trs. 100 KVA 10/0.4 KV

TOTAL 22 Transformers

GAZPROM OIL COMPANY

1 Tr. 25 KVA 10/0.4 KV
2 Trs. 400 KVA 10.4/0.4 KV
2 Trs. 1000 KVA 6/0.4 KV
6 Trs. 1250 KVA 6/0.4 KV
2 Trs. 1600 KVA 6/0.4 KV
2 Trs. 1600 KVA 6.3/0.4 KV
4 Trs. 2500 KVA 6/0.4 KV
2 Trs. 3200 KVA 6/0.4 KV

NOVOPORTOVSKOYE Oil Field

1 Tr. 2500 KVA 6/0.4 KV
2 Trs. 1000 KVA 10/0.4 KV
1 Tr. 630 KVA 6/0.4 KV

TOTAL 25 Transformer

ROSNEFT OIL COMPANY

46 Trs. 25 KVA 10/0.4 KV
32 Trs. 40 KVA 10/0.4 KV
30 Trs. 630 KVA 10/0.4 KV
22 Trs. 1000 KVA 10/0.4 KV
18 Trs. 630 KVA 6/0.4 KV
14 Trs. 1000 KVA 6/0.4 KV
10 Trs. 400 KVA 10/0.4 KV
2 Trs. 100 KVA 6/0.4 KV
2 Trs. 1600 KVA 6/0.4 KV
1 Tr. 1600 KVA 10/0.4 KV

TOTAL 177 Transformers

TRANSNEFT OIL COMPANY

27 Trs. 1000 KVA 6/0.4 KV
12 Trs. 1600 KVA 10/0.4 KV
10 Trs. 1250 KVA 6/0.4 KV
3 Trs. 400 KVA 10/0.4 KV
3 Trs. 630 KVA 6/0.4 KV
2 Trs. 1000 KVA 10/0.4 KV
2 Trs. 3150 KVA 10/0.4 KV
2 Trs. 2500 KVA 10/0.4 KV
2 Trs. 1600 KVA 10/0.4 KV
2 Trs. 1250 KVA 10/0.4 KV
2 Trs. 3150 KVA 6/0.4 KV
1 Tr. 3200 KVA 6/0.4 KV
1 Tr. 2500 KVA 10/0.4 KV

TOTAL 69 Transformers

OIL & GAS - KEY CLIENTS

SVEL

EWA
هيئة الكهرباء والماء
Electricity & Water Authority

Fortum

KEGOC

GAZPROM

dewa

شركة أبوظبي للتوزيع
Abu Dhabi Distribution Co.

LOTTE
HOTELS & RESORTS

თელასი
TELASI

Enel

LUKOIL
OIL COMPANY

DOUBLETREE
BY HILTON™

construction holding
ENKA

ROSNEFT

ROSSETI

KazMunaiGaz

AVELAR
ENERGY GROUP

TRANSNEFT

CELEC
Corporación Eléctrica del Ecuador

ROSATOM

THE LINDE GROUP

KAMAZ

FIFA WORLD CUP
RUSSIA 2018

SVEL is the only company in the world that has transformers installed in the coldest and hottest ambient temperature operating conditions.

Manama, Bahrain (+55ºC)

Yakutia, Russia (-60ºC)

16 MVA SVEL Cast Resin Transformer

حكومة دبي
GOVERNMENT OF DUBAI

هيئة كهرباء ومياه دبي
Dubai Electricity & Water Authority

Khalid Al-Ali
Sr. Inspection Engineer

Islam Fakhri
Inspection Engineer

SVEL

حكومة دبي
GOVERNMENT OF DUBAI

هيئة كهرباء ومياه دبي
Dubai Electricity & Water Authority

Date: 17-Oct-2021 Ref. : DP-P&E-DT&E-DI-1327-2021

To: M/s. SVEL, Russia

Attn: Mr. Alexey Zaikin – Director of Dry Type Transformers Sales department

Email: zaikin@svel.ru

Feedback Letter of Re-capability & Quality Study for M/s. SVEL, Russia

Reference to the Re-capability & Quality Study conducted on 07th – 10th June 2021 to re-assess M/s. RoseEnergo Trans. LCC – (SVEL Group JSC), Russia Capability & Quality.

DEWA is pleased to inform that M/s. RoseEnergo Trans. LCC is Capable to manufacture Cast Resin Distribution Transformers as per DEWA specification & requirements subject to the following:

1) The validity of this letter is 5 years from the date of letter issuance
2) The evaluation / consideration of your offer / bid shall be subject to DEWA's Tendering procedures & policies.
3) This letter is not a commitment for any order.

This notification is issued as per Dubai Electricity & Water Authority's Supplier Qualification procedure.
The Authority bears no responsibility for misuse or mis presentation of this letter.

This is for your information please

شركة أبوظبي للتوزيع
Abu Dhabi Distribution Co.

شركة العين للتوزيع
Al Ain Distribution Company

Fadhil Brljafla
Inspection Engineer

Khalid Alshamsi
Project Engineer

Khalid Ibrahim
Head of Maintenance

SVEL

Abu Dhabi Distribution Company

Company ID : 99130597 **Company Name :** ROSENRGOTRANS (SVEL GROUP)

Company Address

Street :
P.O Box :
City : YEKATERINBURG
Emirate :
Country : RU
Establishment Date : 14-MAY-2009

Telephone : +73432535021
Fax : +73432535012
E-mail : ahmed@svel.ru
Home Page :
Contact Name : Ismaiel Ahmed

Company Type

Vendor	N	ENTERED	**Principal**	N
Contractor	N	ENTERED	**Associate**	N
Manufacturer	Y	QUALIFIED		
ICV Certificate				
Issue Date				
Expiry Date				
ICV Score				

Product No	Product Name	Assessment Grade	Principal	Principal Name	AgencyLink	Certificate No	Validation Date	Certif.ExpiryDate
0306026	TRANSFORMERS: DISTRIBUTION 22/0.4 KV - DRY TYPE.	Qualified						
0306110	TRANSFORMERS: DISTRIBUTION 11/0.415KV-DRY TYPE	Qualified					27-May-26	

KAHRAMAA

كهرماء

المؤسسة العامة القطرية للكهرباء والماء

Qatar General Electricity & Water Corporation

SVEL

EWA
هيئة الكهرباء والماء
Electricity & Water Authority

EWA
هيئة الكهرباء والماء
Electricity & Water Authority

Osama Al-Zayed
Chief of Maintenance and Operation

Hussuin Shaban
Head of materials inspection

EWA
هيئة الكهرباء والماء
Electricity & Water Authority
Kingdom of Bahrain

إدارة توزيع الكهرباء
Electricity Distribution Directorate

5340/6.910/1096 /20/ISM/210481
Oct 10th, 2021

FAX

Cellmec W.L.L.,
Attn.: Mr. Umer Javed,
Estimation and Design Engineer

Fax: 17 730860
Mail: contact@cellmec.com

Dear sIR,

SUBJECT: EQUIPMENT APPROVAL
1500KVA DRY TYPE TRANSFORMER
MAKE: SVEL GROUP, RUSSIA

Name of the Project: Supply, Installation, Testing, and Commissioning of 1500 KVA Transformer, Standard Chartered Bank Manama (Maintained by Client)

This has reference to your submittal No: TX-01 dated 11th August 2021, along with documents for the approval of subject item. We have reviewed the same 1500KVA Dry Type Transformer from manufacturer M/s Svel Group, Russia is considered as approved.

Children FAT for SVEL facilities

SVEL Airport Road Building – Abu Dhabi (TAQA)

SVEL Dubai Electricity and Water Authority (DEWA)

SVEL

SVEL Egyptian Electricity Holding Company (EEHC)

SVEL

Thanks for attention

svel.ru